UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
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OCT - 9 2014

Pilar Patterson, Chief
Mail Code 401-02B
Division of Water Quality
Bureau of Surface Water Permitting
P.O. Box 420
Trenton, NJ 08625-0420

Dear Ms. Patterson:

The purpose of this letter is to provide you with follow-up information concerning three issues that we discussed at the July 15, 2014 NJDEP/EPA Workshop on Combined Sewer Overflows (CSOs): 1) the appropriate criteria for approving a percent removal waiver at wastewater treatment plants that receive combined sewer flows; 2) control of inflow/infiltration (I/I) in the collection system; and 3) the information needed to approve bypasses through NJPDES permits. This letter reflects both EPA Region 2 and EPA Office of Water recommendations.

Percent Removal

Passaic Valley Sewerage Commission (PVSC) has requested a waiver of the 30-day average percent removal requirements for total suspended solids (TSS) and biochemical oxygen demand (BOD) in the federal secondary treatment regulations. PVSC stated it cannot consistently meet the 85% removal requirement because of less concentrated influent that it receives due to deindustrialization and storm water entering the combined sewer collection systems.

Based upon the latest data provided by PVSC, EPA supports waiving the 85% removal requirement during wet weather conditions under 40 CFR 133.103(a). As required by 40 C.F.R. § 133.103(a), the NJDEP must decide, on a case-by-case basis, whether PVSC can attain an alternative percentage removal level during wet weather conditions and specify that level in the permit. EPA anticipates that waiving the 85% removal requirement during wet weather will result in increased combined sewer flows to the treatment plant, thereby reducing the number and volume of CSOs in the collection system. Based on the data we have seen, EPA does not support substituting a lower removal requirement during dry weather conditions because the data submitted by PVSC do not demonstrate that the facility meets all three requirements of 40 C.F.R. § 133.103(e).

EPA suggests that one way that NJDEP can distinguish between wet weather and dry weather conditions is to review the flow and precipitation information for the PVSC wastewater treatment plant to determine appropriate flow conditions that represent wet weather. NJDEP should include this information along with the flow threshold appropriate for waiving the percent removal standard during wet weather in the permit and fact sheet.

Control of I/I

EPA supports NJDEP's inclusion in the draft PVSC permit of requirements to control I/I. EPA recommends NJDEP consider requiring more detailed flow monitoring of individual communities to identify and address areas with excessive infiltration or inflow. As PVSC receives flow from both separate and combined sanitary sewer systems, the NJDEP should consider revising, as necessary, the draft permit conditions to monitor for and reduce excessive infiltration from combined sewer systems and excessive inflow and infiltration from separate sanitary sewer systems. We have attached model NPDES permit language for Municipal Sanitary Sewer Systems, which includes requirements for developing Capacity, Management, Operation and Maintenance (CMOM) Programs that NJDEP may find useful in developing such conditions.

Bypass

The PVSC permit, as are all NPDES permits, is required to include, either expressly or by express reference and incorporation, the regulatory requirements for a bypass in 40 C.F.R. § 122.41(m). Subsection 40 C.F.R. § 122.41(m)(4)(ii) of the bypass provision provides that the NPDES authority may approve an anticipated bypass, after considering its adverse effects, if the NPDES authority determines it will meet the three conditions listed in § 122.41(m)(4)(i). EPA is unaware of information demonstrating that PVSC has met the conditions listed in § 122.41(m)(4)(i). In the absence of such a demonstration, NJDEP cannot approve bypasses.

NJDEP may provide a reopener clause in the reissued permit that would allow the permit to be reopened to add language approving a CSO-related bypass if PVSC submits information demonstrating that the requirements in 40 C.F.R. § 122.41(m)(4)(i) have been met. If the permit is reopened and modified to include a pre-approved bypass, the approval would need to set conditions for when and how an approved bypass would occur.

In order to include a pre-approved bypass in any subsequent permits, the requirements in 40 C.F.R. 122.41(m)(4)(i) would need to be satisfied for each permit. This may be done through the analysis of alternatives in the LTCP. In accordance with the CSO Policy, the study of feasible alternatives in the control plan may provide sufficient support for the permit record and for approval of a CSO-related bypass in the permit itself, and to define the specific parameters for any approved bypass. The CSO Policy contains additional information about this topic at 59 Fed. Reg. 18688, 18693-18694 (April 19, 1994)

The EPA looks forward to continuing to work with the NJDEP to implement all of the requirements of the Clean Water Act and the CSO Control Policy. Please feel free to contact me or Mr. Stan Stephansen of my staff at (212) 637-3776 with any questions, concerns or additional assistance that we can provide.

Sincerely yours,

Kate Anderson, Chief
Clean Water Regulatory Branch

Model NPDES Permit Language for Sanitary Sewer Overflows

Reporting, Record keeping, and Public Notification for Unauthorized Sewage Overflows.

(1) ***Immediate Reporting***

(A) The permittee shall report to the Director any overflow that may endanger health or the environment from a sanitary sewer or any unauthorized overflow from a combined sewer over which the permittee has ownership or operational control. Information shall be provided orally within twenty-four hours from the time the permittee becomes aware of the circumstances. At a minimum, the permittee shall identify:

(i) The location of the overflow;
(ii) The receiving water (if there is one);
(iii) The duration of the overflow; and
(iv) The estimated volume of the overflow.

(B) An *overflow* is any spill, release or diversion of municipal sewage, including:

(i) An overflow that results in a discharge to waters of United States (other than a combined sewer overflow that is authorized by a permit); and
(ii) An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the United States.

(2) ***Written Reports***

(A) The permittee shall also provide a written report to the Director for any overflow identified under paragraph (1) within 5 days of the time the permittee becomes aware of the circumstances. The written report shall contain a description of:

(i) The location of the overflow;
(ii) The receiving water (if there is one);
(iii) An estimate of the volume of the overflow;

(iv) A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
(v) The estimated date and time when the overflow began and stopped or will be stopped;
(vi) The cause or suspected cause of the overflow;
(vii) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
(viii) An estimate of the number of persons who are known to come into contact with wastewater from the overflow; and
(ix) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps.

(B) The Director may waive the written report on a case-by-case basis for reports under paragraph (A) of this section if the oral report required by paragraph (1) above has been received within 24 hours.

(C) DMRs - The permittee shall report any overflow that is not reported under paragraphs (1) or (2)(A) above in the discharge monitoring report required by this permit. The discharge monitoring report shall contain the information listed in paragraph (2)(A) above.

(3) ***Record Keeping*** - The permittee must maintain a record of the following information for a period of at least 3 years from the date of the report:

(A) any report submitted under paragraph (2); and

(B) any report, including work orders that are associated with investigation of system problems related to an overflow, that describes the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow, or that documents system performance.

[NOTE: The NPDES authority should establish a process for requiring the permittee or the NPDES authority to notify specified third parties of overflows that may endanger health. Where the permittee is required make such notification, paragraph (4) may be used].

(4) ***Third Party Notice***

(A) In consultation with relevant state, regional and/or local authorities, the permittee must develop a plan that describes how the permittee will notify, under various overflow (and unanticipated bypass and upset) scenarios, the public, as well as other entities, of overflows that may endanger health. The plan should identify all overflows that would be reported, and the specific information that would be reported to each entity receiving notification. The plan should include a description of lines of communication and the identities of responsible officials.

(B) The permittee must immediately notify the public, health agencies and other affected entities (e.g. public water systems) of overflows from a sanitary sewer and any unauthorized overflow from a combined sewer that the permittee owns or over which it has operational control that meet the criteria developed in accordance with paragraph (A); or any unanticipated bypass or upset that exceeds any effluent limitation in the permit, in accordance with the notification procedures developed in paragraph (A) of this section.

Municipal Sanitary Sewer Systems - Capacity, Management, Operation and Maintenance (CMOM) Programs.

(1) **General Standards**.

(A) Discharges from unauthorized locations are prohibited.

(B) The permittee must properly manage, operate and maintain, at all times, all parts of the collection system that the permittee owns or over which it has operational control;

(C) The permittee must take all feasible steps to stop, and mitigate the impact of, sanitary sewer overflows in portions of the collection system the permittee owns or over which it has operational control.

(2) **Components of CMOM Program**. The permittee must develop and implement a capacity, management, operation and maintenance (CMOM) program that addresses subparagraphs (D), (E), (F), (G) and, if applicable, (H), to comply with paragraph (1) of this section. The permittee must develop a written summary of its CMOM program that addresses subparagraphs (A) through (G), and, if necessary, subparagraph (H). The written summary, and the program audit under paragraph (2)(I) of this section, must be

available to the public upon request. The written summary addressing subparagraphs (A) through (G), and, if necessary, subparagraph (H), and the program audit under paragraph (2)(I) of this section, must be submitted to the NPDES authority with the application for the next permit renewal. The program does not need to address any element of this section that the permittee believes is not appropriate or applicable for its CMOM program, provided that the permittee's written summary explains why such element is not appropriate or applicable. Except as provided above, the program must include the following components:

(A) Goals. The written summary must specifically identify the major goals of its CMOM program, consistent with the general standards identified above.

(B) Organization. The written summary must identify administrative and maintenance personnel positions responsible for implementing measures in its CMOM program, including lines of authority by organization chart or similar document.

(C) Legal Authority. The written summary must describe the permittee's legal authority, e.g., sewer use ordinances, service agreements or other legally binding documents, to:

(i) Control infiltration and connections from inflow sources;
(ii) Require that sewers and connections be properly designed and constructed;
(iii) Ensure proper installation, testing, and inspection of new and rehabilitated sewers (such as new or rehabilitated collector sewers and new or rehabilitated service laterals);
(iv) Control flows from municipal satellite collection systems;
(v) Access all necessary locations and undertake all necessary actions for appropriate emergency response;
(vi) Implement the general and specific prohibitions of the national pretreatment program under 40 CFR 403.5; and
(vii) Control grease.

(D) Overflow Emergency Response Plan. The permittee's CMOM program must include an overflow emergency response plan to protect public health from overflows and unanticipated bypasses or upsets that exceed any effluent limitation in the permit. At a minimum the emergency response plan must include mechanisms to:

(i) Ensure that the permittee is aware (to the greatest extent possible) of all overflows from portions of the collection system over which the permittee has ownership or operational control and any unanticipated bypass or upset that exceeds any effluent limitation in the permit;
(ii) Ensure appropriate responses including assurance that reports of an overflow or of an unanticipated bypass or upset that exceeds any effluent

limitation in the permit are immediately dispatched to appropriate personnel for investigation and response;

(iii) Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained.

(E) Measures and Activities. The permittee's CMOM program must address the following elements that are appropriate and applicable to the permittee's system, and the written summary must identify the person or position in its organization responsible for each element:

(i) Provide adequate maintenance facilities and equipment;

(ii) Maintain a map of the collection system;

(iii) Manage and use timely, relevant information to establish and prioritize appropriate CMOM activities;

(iv) Conduct routine preventive operation and maintenance activities;

(v) Assess the current dry and wet weather capacities of the collection system and treatment facilities which the permittee owns or over which it has operational control;

(vi) Identify and prioritize structural deficiencies, and identify and implement short-term and long-term rehabilitation actions to address each deficiency;

(vii) Provide appropriate training on a regular basis; and

(viii) Maintain equipment and replacement parts inventories including identification of critical replacement parts.

(F) Design and Performance Provisions. The permittee must establish:

(i) Requirements and standards for the installation of new sewers, pumps and other appurtenances; and rehabilitation and repair projects; and

(ii) Procedures and specifications for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

(G) Monitoring, Measurement, and Program Modifications. The permittee must:

(i) Monitor the implementation and, where appropriate, measure the effectiveness of each element of its CMOM program;

(ii) Update program elements as appropriate based on monitoring or performance evaluations; and

(iii) Modify the summary of its CMOM program as appropriate to keep it updated and accurate.

(H) System Evaluation and Capacity Assurance Plan. If peak flow conditions are contributing to an unauthorized discharge from the permittee's separate sanitary collection system or to noncompliance at a treatment plant, then the permittee must prepare and implement a plan for system evaluation and capacity assurance. At a minimum the plan must include:

(i) Evaluation. Steps to evaluate those portions of the collection system which the permittee owns or over which it has operational control which are experiencing or contributing to an unauthorized discharge from its separate sanitary collection system caused by hydraulic deficiency or to noncompliance at a treatment plant. The evaluation must provide estimates of peak flows (including unauthorized flows discharged from the separate sanitary collection system) associated with conditions similar to those causing overflow events, provide estimates of the capacity of key system components, identify hydraulic deficiencies (including components of the system with limiting capacity) and identify the major sources that contribute to the peak flows associated with overflow events.

(ii) Capacity Enhancement Measures. Establish short- and long-term actions to address each hydraulic deficiency including prioritization, alternatives analysis, and a schedule.

(iii) Plan Updates. The plan must be updated to describe any significant change in proposed actions and/or implementation schedule. The plan must also be updated to reflect available information on the performance of measures that have been implemented.

(I) CMOM Program Audits. Beginning no later than the second year of the permit term, the permittee must conduct a comprehensive audit, appropriate to the size of the system and the number of overflows evaluating its CMOM program and compliance with this subsection, including its deficiencies and steps to respond to them.

(J) Communications. The permittee should communicate on a regular basis with interested parties on the implementation and performance of its CMOM program. The communication system should allow interested parties to provide input to the permittee as the CMOM program is developed and implemented.

(3) The permittee must fully implement all components of the CMOM program as described in (2).

[Note: EPA does not recommend inclusion of model permit condition (2)(H) in the permit for municipalities that are already under an enforceable obligation and schedule to prepare and implement a plan for system evaluation and capacity assurance. In such permits, the model language in (2)(I) and (2)(J) would be renumbered (2)(H) and (2)(I), respectively.]